

## ABSTRACT

A group of protocols is described that establish an information bus. The protocols allow various applications and components to plug into the information bus. As a member of the bus, each application or component can exchange information with any other application or component in a structured way. The information bus is especially useful in interconnecting Java beans and applets in a Java virtual machine and in a distributive computer environment. A data consuming apparatus for use with an information bus is disclosed that retrieves data across the information bus for use with applications associated with the information bus, the data is retrieved from other applications sharing the information bus. The apparatus comprises data notification logic and data element retrieval logic. The data notification logic notifies the information bus for the need for a desired data element. The data element retrieval logic retrieves a requested data element from the information bus. The event listing logic is also provided to listen for bus events over the information bus so that the apparatus may retrieve a given data element. A data element managing logic is also provided that is configured to change the data within a data element and the data notification logic is configured to announce the data change across the information bus to the application from which the data element originated. The data element provides a view associated with the data item and can be a Java object.